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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/847,272	05/02/2001	Lorinda L. Yoder	1-13722	6921

4859 7590 09/12/2003

MACMILLAN SOBANSKI & TODD, LLC
ONE MARITIME PLAZA FOURTH FLOOR
720 WATER STREET
TOLEDO, OH 43604-1619

[REDACTED] EXAMINER

LEE, SHUN K

[REDACTED] ART UNIT [REDACTED] PAPER NUMBER
2878

DATE MAILED: 09/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/847,272	YODER, LORINDA L.
	Examiner	Art Unit
	Shun Lee	2878
<i>-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --</i>		
Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.		
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.		
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.		
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.		
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).		
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
1) <input type="checkbox"/> Responsive to communication(s) filed on _____.		
2a) <input type="checkbox"/> This action is FINAL. 2b) <input checked="" type="checkbox"/> This action is non-final.		
3) <input type="checkbox"/> Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4) <input checked="" type="checkbox"/> Claim(s) <u>1-12</u> is/are pending in the application.		
4a) Of the above claim(s) _____ is/are withdrawn from consideration.		
5) <input type="checkbox"/> Claim(s) _____ is/are allowed.		
6) <input checked="" type="checkbox"/> Claim(s) <u>1-12</u> is/are rejected.		
7) <input type="checkbox"/> Claim(s) _____ is/are objected to.		
8) <input type="checkbox"/> Claim(s) _____ are subject to restriction and/or election requirement.		
Application Papers		
9) <input type="checkbox"/> The specification is objected to by the Examiner.		
10) <input checked="" type="checkbox"/> The drawing(s) filed on <u>02 May 2001</u> is/are: a) <input type="checkbox"/> accepted or b) <input checked="" type="checkbox"/> objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
11) <input type="checkbox"/> The proposed drawing correction filed on _____ is: a) <input type="checkbox"/> approved b) <input type="checkbox"/> disapproved by the Examiner.		
If approved, corrected drawings are required in reply to this Office action.		
12) <input type="checkbox"/> The oath or declaration is objected to by the Examiner.		
Priority under 35 U.S.C. §§ 119 and 120		
13) <input type="checkbox"/> Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).		
a) <input type="checkbox"/> All b) <input type="checkbox"/> Some * c) <input type="checkbox"/> None of:		
1. <input type="checkbox"/> Certified copies of the priority documents have been received.		
2. <input type="checkbox"/> Certified copies of the priority documents have been received in Application No. _____.		
3. <input type="checkbox"/> Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).		
* See the attached detailed Office action for a list of the certified copies not received.		
14) <input type="checkbox"/> Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).		
a) <input type="checkbox"/> The translation of the foreign language provisional application has been received.		
15) <input type="checkbox"/> Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.		
Attachment(s)		
1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)		
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)		
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> .		
4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s) _____.		
5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)		
6) <input type="checkbox"/> Other: _____.		

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "24" has been used to designate both line (connecting camera 20 and computer 26) and finish (see third plastic container 16 suspended from slot 32). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
2. The drawings are also objected to as failing to comply with 37 CFR 1.84(u)(1) because where only a single view is used in an application to illustrate the claimed invention, it must not be numbered and the abbreviation "FIG." must not appear. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Schrader *et al.* (US 5,459,313).

In regard to claims 1, 2, and 7, Schrader *et al.* disclose (column 1, lines 8-22; Fig.) a container surface defect detection system and method comprising:

- (a) a source (12) of ultraviolet radiation (column 7, lines 41-51);
- (b) a plastic container (7; column 6, lines 43-49) having a surface and a longitudinal axis (column 5, lines 12-19);
- (c) means (*i.e.*, transport unit 1 comprising a conveyor 4) for directing said container (7) along a path (on a conveyor 4) through the radiation, such that the ultraviolet radiation is directed from the source to the container surface (column 3, lines 33-42);
- (d) detecting means (CCD detector 28) for receiving and sensing a portion of the ultraviolet radiation reflected (column 3, lines 33-42) from the surface of said plastic container (7), and being responsive to generate a signal representing a defect in the surface of the container (*i.e.*, condition of the tested surface; column 3, lines 49-54, column 7, lines 6-11); and
- (e) a computer means (3) connected to said detecting means (28) and being responsive to the generated signal for calculating a defect value, comparing the defect value with stored standards (*i.e.*, at least one reference signal; column 3, line 55 to column 5, line 6), and indicating one of acceptance and rejection (*i.e.*, classifying step can include classifying the containers as acceptable and unacceptable containers; column 3, line 55 to column 5, line 6, column 5, line 54 to column 6, line 3) for said plastic container (7).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3-6 and 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schrader *et al.* (US 5,459,313) in view of Gomibuchi (US 5,305,391), McGrath (US 6,169,318), and Windham *et al.* (US 6,587,575).

In regard to claims **3-6** (which are dependent on claim 1) and claims **8-12** (which are dependent on claim 7), the system and method of Schrader *et al.* lacks a computer monitor for displaying an inspection result generated by the computer means which performs algorithms for determining the scope of a defect and wherein the detecting means for sensing the portion of the radiation comprises at least one vision system which is a camera having a minimum window size of 480 pixels by 480 pixels.

Gomibuchi teaches (column 1, line 63 to column 2, line 39, column 3, lines 32-65, column 4, lines 4-9) to provide at least one vision system which is a charge coupled device (CCD) camera, a controller (for analyzing with algorithms the scope of a defect), and a monitor, in order to detect, process, and display defects with a high degree of accuracy. Further, CCD cameras are well known in the art. For example, McGrath teaches (column 1, lines 13-46) that commonly used moderate resolution CCD cameras comprise 512 rows and 768 columns. As another example, Windham *et al.* teach (column 11, lines 1-7) that high resolution CCD cameras are commercially available.

Therefore it would have been obvious to one having ordinary skill in the art to provide a high resolution (e.g., a minimum window size of 480 pixels by 480 pixels) CCD camera and a computer monitor in the system and method of Schrader *et al.*, in order to detect, analyze, and display defects with a high degree of accuracy as taught by Gomibuchi.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shun Lee whose telephone number is (703) 308-4860. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on (703) 308-4852. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


CONSTANTINE HANNAFER
PRIMARY EXAMINER
GROUP ART UNIT 2878

SL

August 28, 2003